

WHAT IS CLAIMED IS:

1. An optical sheet suitable for use in a laminate comprising at least one glazing component having a peripheral edge, said optical sheet comprising a non-metallic multi-layer optical film, said optical film having multiple layers and a peripheral edge, said optical film being dimensioned such that, when bonded to a glazing component having a peripheral edge, at least a substantial portion of the peripheral edge of said optical film is positionable so as to be substantially co-extensive with a corresponding portion of the peripheral edge of the glazing component, and said multiple layers are fused together along at least said substantial portion of the peripheral edge of said optical film so as to at least substantially reduce delamination of said multiple layers along at least said substantial portion of the peripheral edge of said optical film.

2. The optical sheet according to claim 1, wherein said optical film is dimensioned so that substantially all of the peripheral edge of said optical film is positionable so as to be substantially co-extensive with the peripheral edge of the glazing component to which said optical sheet is to be bonded, and said multiple layers are fused together along substantially all of the peripheral edge of said optical film so as to at least substantially reduce delamination of said multiple layers along substantially all of the peripheral edge of said optical film.

3. The optical sheet according to claim 1, wherein said multiple layers are at least thermally fused together along at least said substantial portion of the peripheral edge of said optical film.

4. A laminate comprising the optical sheet according to claim 1, with said optical sheet having a major surface and a peripheral edge, and a first bonding sheet having a major surface and a peripheral edge, said first bonding sheet being suitable for bonding to a glazing component having a major surface and a peripheral edge and to said optical sheet, and the major surface of said optical sheet and the major surface of said first bonding sheet being positioned together.

5. The laminate according to claim 4, wherein said optical sheet has another major surface and said laminate further comprises a second bonding sheet having a major surface and a peripheral edge, the major surface of said second bonding sheet being positioned relative to the other major surface of said optical sheet such that said optical sheet is disposed between said first bonding sheet and said second bonding sheet, and said second bonding sheet being suitable for bonding to the major surface of another glazing component.

6. The laminate according to claim 5, wherein said laminate is a glazing laminate further comprising two glazing components, each of said glazing components having a major surface and a peripheral edge, wherein each of said first bonding sheet and said second bonding sheet has another major surface that faces the major surface of one or the other of said glazing components, said optical sheet is disposed between said first and second bonding sheets, said first and second bonding sheets are disposed between said glazing components, and at least said substantial portion of the peripheral edge of said optical film is positioned so as to be substantially co-extensive with a corresponding portion of the peripheral edge of at least one of said glazing components.

7. The laminate according to claim 6, wherein substantially all of the peripheral edge of said optical film is positioned so as to be substantially co-extensive with the peripheral edge of at least one of said glazing components.

8. The laminate according to claim 6, wherein each of said first and second bonding sheets is fully bonded to said optical sheet and to its respective glazing component.

9. The laminate according to claim 6 or 8, wherein at least said substantial portion of the peripheral edge of said optical film is positioned so as to be substantially co-extensive with a corresponding portion of the peripheral edges of said glazing components.

10. The laminate according to claim 6 or 8, wherein at least said substantial portion of the peripheral edge of said optical film is positioned so as to be substantially co-extensive with a corresponding portion of the peripheral edge of at least one of said glazing components.

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11. The laminate according to claim 6 or 8, wherein at least a remaining portion of the peripheral edge of said optical film is positioned so as to extend substantially beyond the peripheral edge of both of said bonding sheets, and the peripheral edge of each of said bonding sheets is substantially co-extensive with or lies substantially within the peripheral edge of both of said glazing components.

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12. The laminate according to claim 6 or 8, wherein at least a substantial portion of the peripheral edge of said optical film is positioned so as to extend substantially beyond the peripheral edge of both of said bonding sheets, and the peripheral edge of each of said bonding sheets is substantially co-extensive with or lies substantially within the peripheral edge of both of said glazing components.

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13. The laminate according to claim 8, wherein at least said substantial portion of the peripheral edge of said optical film is not encapsulated within bonding sheet material.

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14. The laminate according to claim 8, wherein said laminate is a glazing suitable for use in a vehicle window.

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15. The laminate according to claim 13, wherein said multiple layers along substantially all of the peripheral edge of said optical film are fused together.

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16. The laminate according to claim 9, wherein substantially all of the peripheral edge of said optical film is positioned so as to be substantially co-extensive with the peripheral edge of both of said glazing components.

17. The laminate according to claim 15, wherein substantially all of the peripheral edge of said optical film is not encapsulated within bonding sheet material.

18. A method of making a glazing laminate for use in a window structure,
5 the glazing laminate comprising an optical sheet sandwiched between two bonding sheets and the bonding sheets sandwiched between two glazing components, said method comprising:

providing an optical sheet comprising a non-metallic multi-layer optical film with multiple layers;

10 dimensioning the optical sheet so that at least a substantial portion of the peripheral edge of the optical film is positionable so as to be substantially co-extensive with a corresponding portion of the peripheral edge of at least one of the glazing components; and

15 fusing together the multiple layers along at least the substantial portion of the peripheral edge of the optical film so as to at least substantially reduce delamination of the multiple layers along the substantial portion of the peripheral edge of the optical film.

19. The method according to claim 18 further comprising:

20 also providing two bonding sheets and two glazing components, with each of the bonding sheets being suitable for bonding to the optical sheet and to the glazing components;

sandwiching the optical sheet between the bonding sheets and the bonding sheets between the glazing components;

25 positioning the optical sheet so that at least the substantial portion of the peripheral edge of the optical film is positioned so as to be substantially co-extensive with a corresponding portion of the peripheral edge of at least one of the glazing components; and

fully bonding the optical sheet, bonding sheets and glazing components together.

30 20. The method according to claim 19, wherein said dimensioning the optical sheet occurs before or after said sandwiching.

21. The method according to claim 18 or 19, wherein said fusing occurs after said dimensioning the optical sheet.

5 22. The method according to claim 18 or 19, wherein said dimensioning the optical sheet and said fusing occur simultaneously.

10 23. The method according to claim 19, wherein said fusing occurs after said fully bonding.

15 24. The method according to claim 19, wherein said dimensioning the optical sheet occurs before said fully bonding.

25. The method according to claim 19 further comprising dimensioning the bonding sheets so that after said fully bonding at least the substantial portion of the peripheral edge of the optical film is not encapsulated within bonding sheet material.

20 26. The method according to claim 25, wherein said fusing, said dimensioning of the optical sheet and said dimensioning of the bonding sheets occur simultaneously.

25 27. The method according to claim 19, wherein said dimensioning the optical sheet further comprises dimensioning the optical sheet so that at least a remaining portion of the peripheral edge of the optical film is positioned so as to extend substantially beyond the peripheral edge of at least one of the glazing components, and said method further comprises dimensioning the bonding sheets so that the peripheral edge of each of the bonding sheets is substantially co-extensive with or lies substantially within the peripheral edge of both of the glazing components.